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(71) Applicant

Antonio Paredes Borja
Pontiente, Chalet No 9, 30158 Los Garres (Murcia),
Spain

(72) Inventor

Antonio Paredes Borja

(74) Agent and/or Address for Service

Marks & Clerk
57-60 Lincoln's Inn Fields, London, WC2A 3LS,
United Kingdom

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(58) Field of search

UK CL (Edition K) A6M
INT CL⁵ A63B 21/04 21/16

(54) Improved portable gymnastic apparatus

(57) The gymnastic apparatus is formed by means of a pair of ties (13) to which a gymnastic accessory (11) can be coupled from which the user will pull in order to do the corresponding exercises. The ties (13) are mounted in such a way that they pass through both pulleys (12) in order to be anchored to some tensors (14) fastened by their opposite end to respective bases (2) that are attached to the surface (inner or outer) of a conventional door (1), the pair of bases (2) being connected by means of bands (7) to another similar pair located on the surface or face opposite the door (1).

Four bases (2) are mounted on said door (1) in a top area and another four bases (2) in a bottom area, each pair connected by means of bands (7), which transversally pass along the top edge and the bottom edge of the door itself (1). The bands (7) which have access to the surface opposite the one where the ties (13), accessories (11), tensors (14) and pulleys (12) are mounted, are connected together by means of bands (9). The bases have a slot to accommodate the bands (7) in a block (5) being journalled in a stirrup to compensate for irregularities of construction.

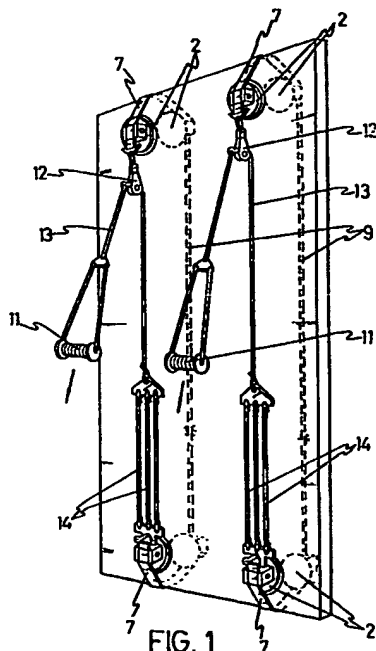


FIG. 1

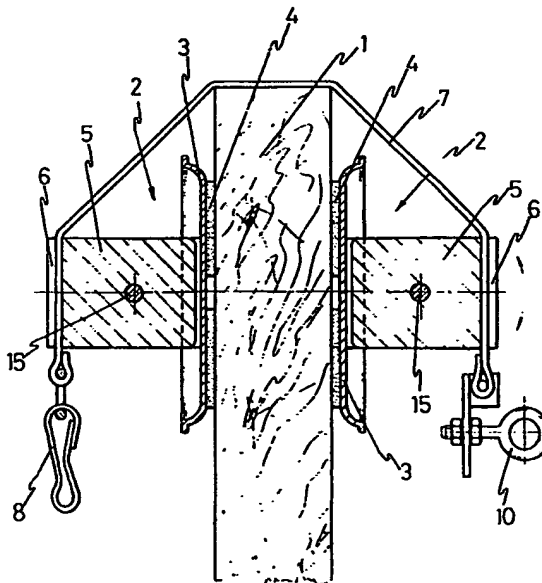
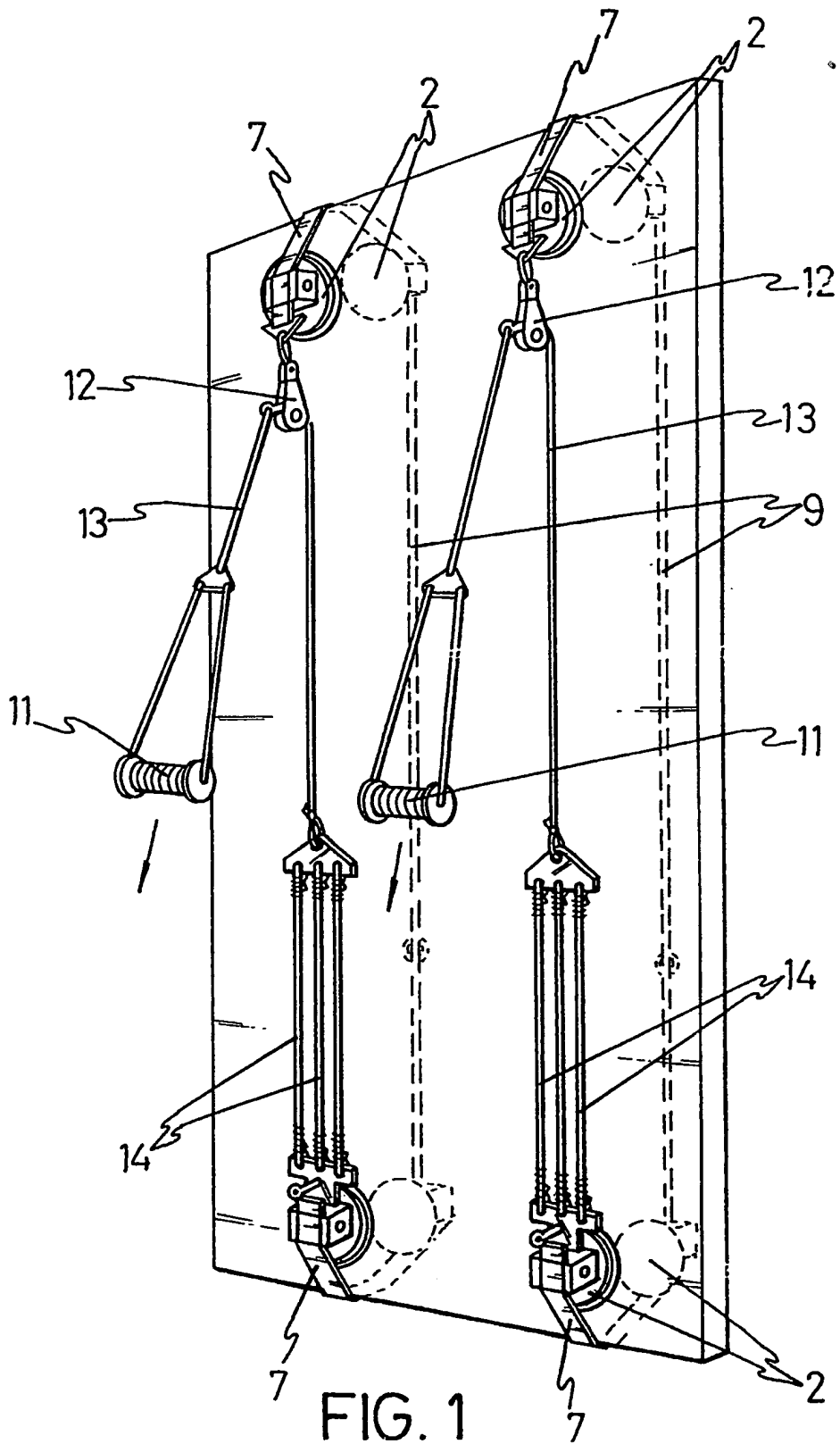


FIG. 3

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

This print takes account of replacement documents submitted after the date of filing to enable the application to comply with the formal requirements of the Patents Rules 1990.

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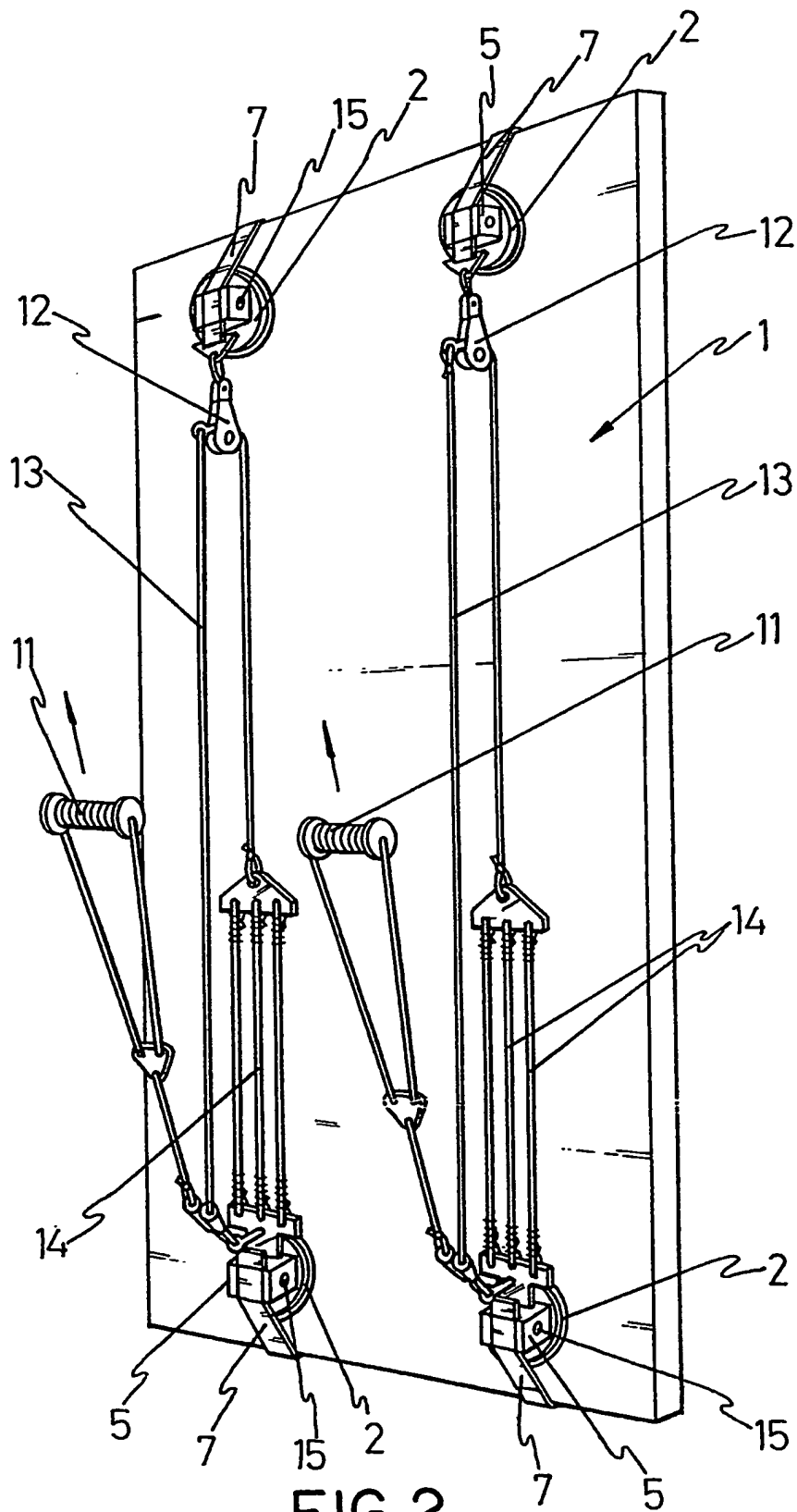


FIG. 2

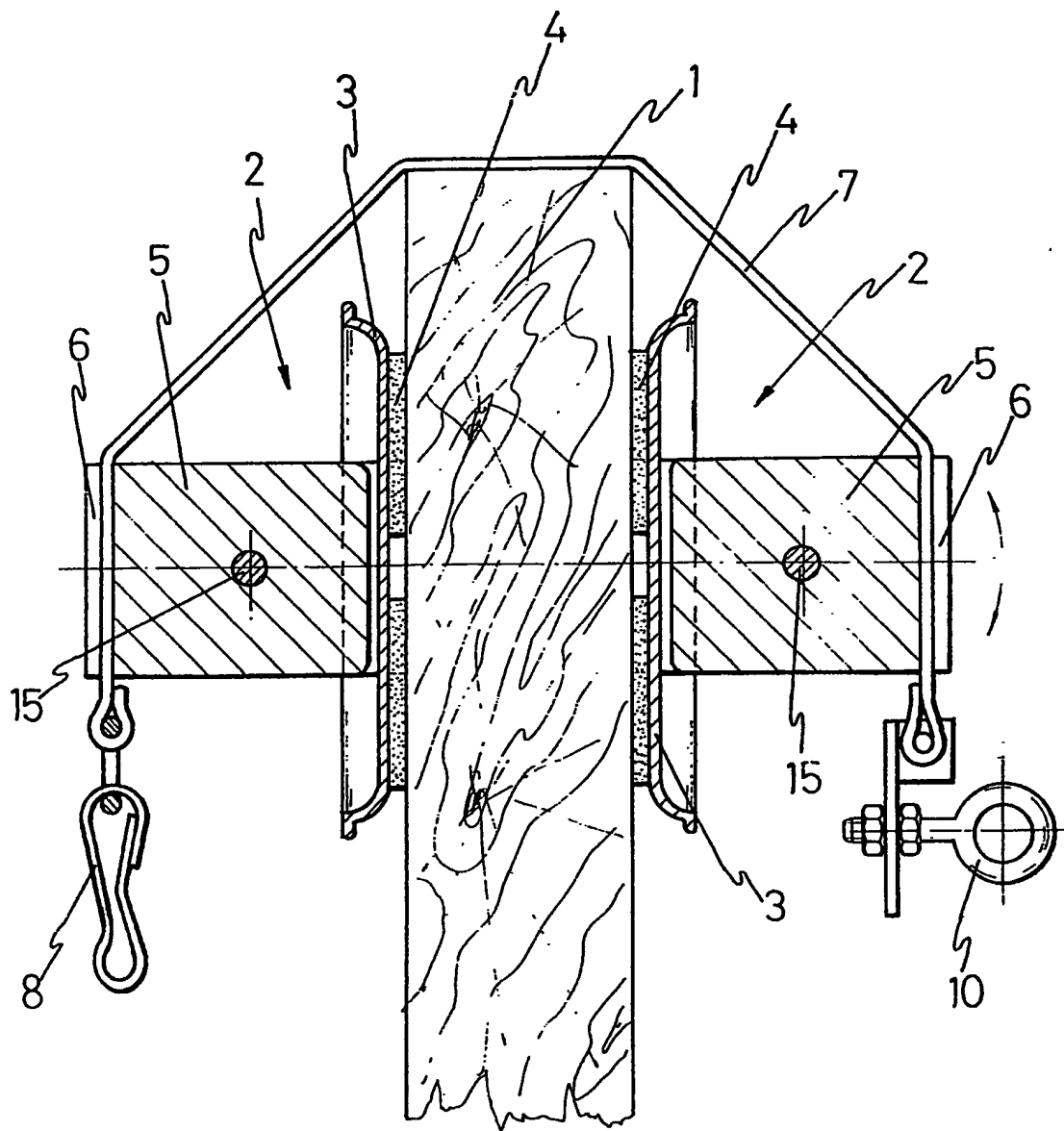


FIG. 3

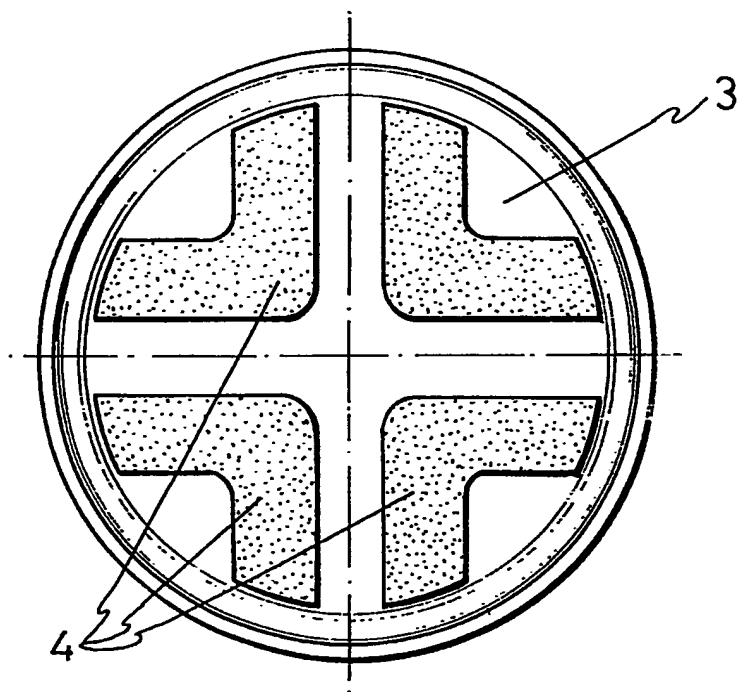


FIG. 4

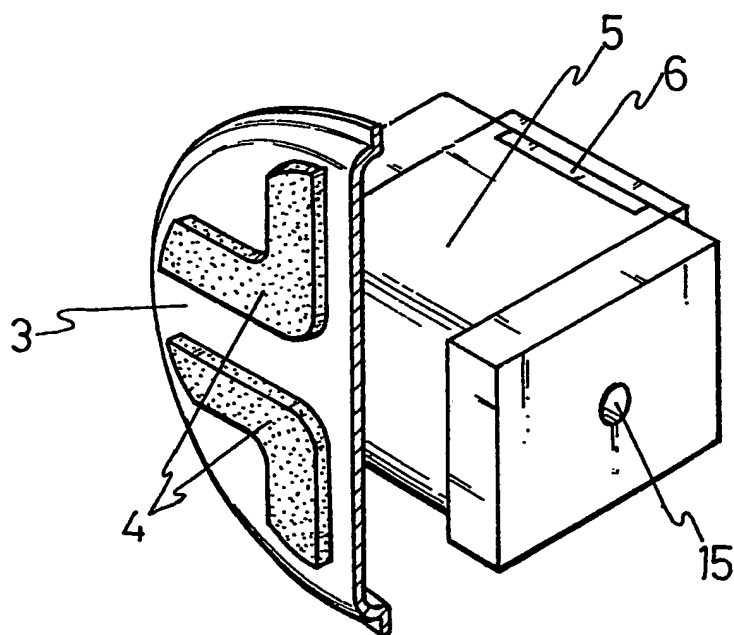


FIG. 5

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IMPROVED PORTABLE GYMNAS TIC APPARATUSOBJECT OF THE INVENTION

The present invention, as is expressed in the title of this specification, refers to a portable gymnastic apparatus, based on some elements to which some pulleys and corresponding tensors that pass through the latter are connected, in order to permit mounting and handling of different gymnastic accessories. The apparatus is basically foreseen to be mounted on a door, permanently or removably, without ruling out the possibility of mounting it on a wall, by means of screw rings, hoops, etc.

BACKGROUND OF THE INVENTION

Different gymnastic apparatus applicable to doors are known, among which utility models 269.000 and 8902317 can be cited, in such a way that the former is a gymnastic apparatus basically foreseen for exercises to treat spinal ailments and it is based on a telescopic extensible structure that is fastened at the top and bottom and center by some hooks that allow stabilization along the wall which must be held on to. When it is to be mounted on a door, the door is physically damaged and besides the use of conventional pulleys is not possible since there is no device for this purpose.

The other utility model of the two cited, being applicable to doors is based on placement, on both sides of doors, two bars joined by bands, one of which is a fastening once the door is closed, while the other, located on the opposite side, permits hooking of tensors or other gymnastic elements. Therefore, the apparatus which we are referring to is foreseen to be hung from the top part of a door, in position towards the floor, it being necessary to dismount the same when the door itself is to be used.

Besides, in this second apparatus it is not possible

to use pulleys and besides the door can become worn.

In order to solve these inconveniences corresponding to the above cited utility models, the applicant conceived the pulley gymnastic apparatus claimed in utility model 9001247, based on two parallel bars or sections thereof joined by means that establishes a separation between them, remaining located in the mounting on the back surface of a door, one near the top edge and another near the bottom edge, said bars being joined by adjustable ties that fix the stable position thereof. Bands that surround the top part and bottom part of the door, becoming visible at the front of it are joined to said bars. Here support flanges that receive the gymnastic apparatus by pulleys that join the two top ones with the two bottom ones are joined. These support flanges are provided on the surface in contact with the door with some pads that prevent wear of the surface of the door and that permit one to do exercises parallel to the door with the necessary separation.

The advantages derived from the structure claimed in the utility model 9001247 are clearly set forth in the corresponding specification thereof.

DESCRIPTION OF THE INVENTION

The portable gymnastic apparatus of the invention, being based precisely on utility model 9001247 has a series of innovations that lead to substantial improvements and advantages regarding the former.

To this effect, one of the basic features that the new apparatus has is the support flanges that are attached to the door acting as a general support of the apparatus on the whole, foreseeing as a novel element of the support flanges the fact that the body that forms them has a tilting shaft that acts as if it were a balance beam, absorbing the possible verticality variations

- endured by the corresponding band that passes through the support flanges and that pass through the top and bottom edges of the door, during use of the apparatus.

Another novel feature that the apparatus of the invention has resides on the fact that instead of parallel bars or sections of them for rear mounting, just like on the front part, the same separating bases, connected in the rear part, the top one with the bottom one, by means of respective ties or tensors, have been provided. In other words, instead of using four separating bases for mounting the apparatus as in the previous utility model, in the present case eight separating bases are used, thus eliminating the rear bars and permitting greater versatility of the apparatus itself, to which numerous gymnastic accessories can be adapted offering the possibility of doing up to sixty different exercises. Besides, the apparatus can be mounted on a wall without using the bases, by fastening it with four previously installed ring hooks.

To all of these new advantages and features that the apparatus object of the invention offers, it is logically necessary to add those already cited in utility model 9001247 cited above.

In order to complement the description that is going to be made hereinafter and for the purpose of providing a better understanding of the features of the invention, a set of drawings whose figures will make it easy to understand the innovations and advantages of the gymnastic apparatus object of the invention is attached to this specification.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1.- It shows a view of the portable gymnastic apparatus mounted on a door, in which the resistance points are located on the top part.

Figure 2.- It shows a view similar to that of the

previous figure but with the resistance points in the bottom part.

Figure 3.- It shows a detailed sectional view of the top part of a door upon which the corresponding apparatus is mounted, allowing us to see the two separating bases through which the corresponding bands pass, in such a way that the after end of the band is joined to a hook for the tensor that will go up to the bottom base, while the front end of the band includes the hook element for the respective gymnastic accessory.

Figure 4.- It shows a plan view at the application surface of one of the eight separating bases that includes the apparatus of the invention.

Figure 5.- It shows a side perspective view of one of the bases where the support platform has been sectioned so that we can see the body called the support flange itself.

DESCRIPTION OF A PREFERRED EMBODIMENT

In view of the figures commented on, it can be seen how the gymnastic apparatus of the invention is basically foreseen to be mounted on a door (1) and that the door can be opened and closed freely without the apparatus in question being an obstacle. To this effect, said apparatus is comprised of eight separating bases (2) identical to each other, four of them placed in front of the door (1) and the other four behind the door. Pairs face each other and are located close to the top edge and bottom edge, respectively of the door itself (1). These bases (2) are formed by a sort of platform (3) that on its surface applied to the door includes some soft pieces (4) provided in order not to damage the surface of the door, also comprising body (5), which acts as a joint and which is fitted with a groove (6) for the passing of the end corresponding to a band which passing through the edge of the door, on top and on the bottom, is connected to

piece (5) corresponding to the other separating base (2), as is clearly shown in detail in figure 3, wherein a pair of separating pieces (2) between which is connected a band (7) that passes above the top edge of the door itself (1) is observed with the particularity that the ends of said band (7) pass through the groove (6) of the piece (5) in one of them, specifically the one located in the rear part including a spring catch or hook (8) for a tensor (9) that will connect with the assembly foreseen in the bottom part, while in the front part there is a hook (10) for the respective gymnastic accessory (11), as is shown in figures 1 and 2, with the particularity that in said hook (10) there is a pulley (12) which is precisely through which the tie (13) passes which belongs to the gymnastic accessory numbered (11.) The tie (13), depending on the position of accessory (11), in other words, in accordance with whether it is located on the top part as seen in figure 1, or on the bottom part as seen in figure 2, is connected to the contrary separating base by means of tensors (14.)

Returning to the base (2) formed by the platform (3) and body (5), it is necessary to point out the fact that this latter body is provided with a shaft (15) regarding which the body (5) can tilt and thus absorb the possible verticality variations endured by band (7) during handling of the apparatus, forming what could be considered as a balance beam.

CLAIMS

1. Improved portably gymnastic apparatus, which being provided for application to doors and comprising some separating bases to which bands that pass above and below the door are connected, between whose separating bases there are ties connected to the respective gymnastic accessories, essentially characterised because it includes eight separating bases (2) located as opposite pairs, in correspondence with the front part and rear part of the door (1) respectively, with the particularity that the band (7) passing over the top edge and under the bottom edge of the door itself (1) have their ends connected to the separating bases (2), including the ones provided in the rear part of the door some hook means (8) for tensors (9) for fastening to the respective bottom separating base (2), while at the front part there are hook means (10) for a pulley (12) through which a tensor (13) passes, which through other tensors (14) is connected to the corresponding gymnastic accessory (11); it being provided that each separating base (2) is formed by a platform (3) that is fitted to the respective surface of the door (1) with soft pieces (4) in between said platform (3) being complemented with a piece (5) having a groove (6) for the passing of the corresponding end of the band (7), also with the particularity that piece (5) includes a tilting shaft (15) forming a sort of balance beam absorbing the possible variations of quality on the band itself (7), during use of the apparatus.

Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)

Application number

GB 9214226.4

Relevant Technical fields

(i) UK CI (Edition ^K) A6M

(ii) Int CI (Edition ⁵) A63B 21/04, 21/16

Databases (see over)

(i) UK Patent Office

(ii)

Search Examiner

A T BLUNT

Date of Search

15 OCTOBER 1992

Documents considered relevant following a search in respect of claims ¹

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
A	US 4109907 (ZITO)	1
A	ES 9001247 U (PAREDES BORJA)	1

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Category	Identity of document and relevant passages	Relevance to claim(s)

Categories of documents

X: Document indicating lack of novelty or of inventive step.

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&: Member of the same patent family, corresponding document.

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